

**DEPARTMENT OF TRANSPORTATION**

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch

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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:**Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-012615**Date Inspected:** 09-Mar-2010**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1900**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:****CWI Present:****Yes No****Inspected CWI report:** **Yes No N/A****Rod Oven in Use:** **Yes No N/A****Electrode to specification:** **Yes No N/A****Weld Procedures Followed:** **Yes No N/A****Qualified Welders:** **Yes No N/A****Verified Joint Fit-up:** **Yes No N/A****Approved Drawings:** **Yes No N/A****Approved WPS:** **Yes No N/A****Delayed / Cancelled:** **Yes No N/A****Bridge No:** 34-0006**Component:** Trial Assembly**Summary of Items Observed:**

On this day Caltrans OSM Quality Assurance (QA) Inspector Christopher D'souza was present during the times noted above for observations relative to the fabrication of the SAS Superstructure being performed by Zhen Hua Port Machinery Company (ZPMC) at Chang Xing Island in Shanghai, China. QA Inspector observed and/or found the following:

Trial Assembly

6BW

This QA Inspector observed ZPMC welding personnel's performing base metal repair by Shielded Metal Arc welding (SMAW) on DP247A-001 (6BW Deck Panel). Repair is being performed utilizing Critical Weld Repair (CWR) B-CWR1231. Welder is identified as 037743. ZPMC QC is identified as Zong Yong Gang. The welding variables recorded by QC appeared to comply with the WPS-345-SMAW 1G (1F)-FCM-REPAIR 1

7BW-7CW Transverse Splice

QA Inspector ZPMC personnel back gouging 7BW to 7CW side plate to side plate (SP-SP) splice weld on Crossbeam (CB) and Counterweight (CW) side.

Outside Segments

9AE, 9BE, 9DE

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No relevant observations

9CE

QA Inspector observed ABF Inspectors performing Ultrasonic Testing (UT) on splice welds SP-SP splice (CB side), BP-BP splice and Side plate to Bottom plate (SP-BP weld).

9EE

QA Inspector observed ZPMC personnel performing repairs on visually rejectable by grinding; this includes grinding of excess weld metal and removal of temporary attachments.

9AW

QA Inspector observed ZPMC personnel performing repairs on visually rejectable by grinding. Grinding was being performed on T-stiffeners on areas where temporary attachments were removed.

9BW, 9 CW, 9DW

No Relevant observations

9 EE

QA Inspector observed ABF Inspectors performing Visual Inspection on Longitudinal Diaphragm (LD) to Floor Beam weld. Visually unacceptable areas were being marked out for repair by grinding or welding.

10AE, 10BE, 10CE

No Relevant Observation

11AE, 11BE, 11CE, 11AW, 11BW, 11CW

No Relevant Observation

11DE, 11EE, 11DW and 11EW are located in bay 14

QA Inspector performed Random walks on the areas listed above throughout the shift duration.

This QA Inspector was involved in PAUT (Phased Array Ultrasonic Testing) training for detection of cracked tacks in Deck Panels as per the following procedure “UT 04-0120F4 PJP Rib Weld Phased Array Ultrasonic Testing for the Detection and Sizing of Suspected Planar Discontinuities (Cracks) in PJP Welds”

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Unless otherwise noted, all work observed on this date appeared to be in general compliance with the applicable contract documents.

### Summary of Conversations:

No relevant conversations.

### Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang 15000422372, who represents the Office of Structural Materials for your project.

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<b>Inspected By:</b>	Dsouza,Christopher	Quality Assurance Inspector
<b>Reviewed By:</b>	Carreon,Albert	QA Reviewer

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